a time series of physiological parameters that are characteristic of the development of sleep and wake modes.

In Claim 13, line 1, please change "Method" to --The method--.

14.   (Amended) <u>The method</u> [Method] according to [one of the claims] <u>Claim 1</u> [through 10] in which the time series of at least one of the system variables x(t) comprises a time series of speech signals.

Kindly add the following new Claim 15:

--15.   A method for detecting modes of a dynamic system with a multiplicity of modes s_i that each have a set α (t) of characteristic system parameters comprising:

subjecting a time series of at least one system variable x(t) to modeling such that in each time segment of a predetermined minimum length a predetermined prediction model f_i for a system mode s_i is detected for each system variable x(t);
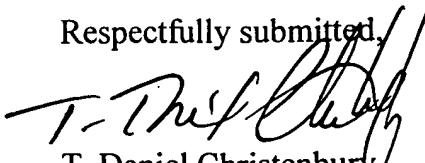
causing a transition of the system from a first system mode s_i to a second system mode s_j in each time segment by drift segmentation; and

detecting a series of mixed prediction models g_i by linear, paired superimposition of prediction models $f_{i,j}$ of the two system modes $s_{i,j}$.--

Remarks

We have amended the Specification and the Claims to place them into conformance with U.S. Rules of Practice. New Claim 15, which is similar to Claim 1, has been added. We respectfully request examination on the merits.

Respectfully submitted,

T. Daniel Christenbury
Reg. No. 31,750
Attorney for Applicant(s)

TDC:lh
(215) 563-1810